BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection for Special Access	CC Docket No. 93-162

TO THE COMMISSION

DIRECT CASE OF SOUTHWESTERN BELL TELEPHONE COMPANY

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SUMMARY*

This Direct Case proves that SWBT's Expanded interconnection tariff rates and terms and conditions are reasonable and should not be subject to any suspension whatsoever. Pending judicial review of the Special Access Order, SWBT's Expanded interconnection tariff must be allowed to remain in effect as originally filed, adjusted by the GSF reallocation.

The Commission has assured the Court of Appeals for the D.C. Circuit that SWBT and other LECs will be fully compensated for their assets through the tariff rates. If SWBT is not allowed to recover the costs that its rates are designed to recoup, this assurance to the Court will be hollow.

SWBT's TRP shows that SWBT's rates were reasonably constructed. Even though the Bureau's methodology behind the prescribed Sample Price-out is flawed, SWBT has completed it according to the Bureau's directions.

SWBT justifies specific aspects of its rates in response to the issues listed by the Bureau. For example, SWBT's Floor Space Charges and Power Charges are explained in detail. SWBT also supports herein its decisions in structuring its terms and conditions. For example, SWBT shows that it is reasonable not to allow interconnection with SWBT-provided dark fiber.

For the reasons set out herein, the Bureau should end the suspension, investigation, and accounting order on SWBT's Expanded interconnection tariffs.

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* All abbreviations used herein are referenced within the text.

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DIRECT CASE OF
SOUTHWESTERN BELL TELEPHONE COMPANY

Southwestern Bell Telephone Company (SWBT), pursuant to the order designating issues for investigation in this docket,[1] hereby files its Direct Case. On July 23, 1993, the Common Carrier Bureau established issues for investigation in connection with the LECs' Expanded Interconnection/Collocation Tariffs. SWBT herein responds to those issues.

I. SWBT's RESPONSES.

A. Are the Rate Levels Established in the LECs' Physical and Virtual Expanded Interconnection Tariffs Excessive?[2]

1. General Support Requirements.

a. Tariff Review Plan.

LECs must provide certain cost support data in a uniform format, as specified in the Tariff Review Plan (TRP) in Appendix C

[1] Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection for Special Access, CC Docket No. 93-162, Order Designating Issues for Investigation, (DA93-951) (released July 23, 1993, Com. Car. Bur.) (Designation Order).

[2] Designation Order at para. 3.

of the Designation Order.[3] As required, SWBT has categorized its rate elements into the following functions:

(1) Entrance Facility Installation Functions
(2) Entrance Facility Space Functions
(3) Common Construction Function
(4) Construction Provisioning Function
(5) Interconnector Specific Construction Function
(6) Floor Space Function
(7) Termination Equipment Function
(8) Direct Current (DC) Power Installation Function
(9) DC Power Generation Function
(10) Cross-Connection Provisioning Function
(11) Cross-Connection Cable and Cable Support Functions
(12) Cross-Connection Equipment Function
(13) Security Installation Function
(14) Active Security Function[4]

Appendix 1, attached hereto is SWBT's TRP. A diskette version is also included.

b. Itemized Cost Information.

Attached as Appendices 2 and 3 are the detailed discussions of SWBT's cost development methods. Included in these Appendices are details of the factors utilized including cost of money and depreciation, details on labor functions and labor rates, and discussions of the cost development of each element.

SWBT is further required to "justify the percentage cost of money used in its rate calculations, as displayed on each TRP chart." Exhibit 1, p. 2 of Appendix 2 discusses SWBT's development of the Cost of Money utilized in the development of the Cost of Money cost factor used in the collocation cost studies. The factors developed using the method prescribed in the TRP differ

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[3] Designation Order at para. 14.

[4] Designation Order at para. 15.

from the actual factor utilized because of the difference in methodology (i.e., SWBT utilizes Bellcore's CAPCOST program to develop a levelized Cost of Money Factor which equals the net present value of the expected cost of money divided by the net plant in service for the account for which the factor is being developed). However, the Cost of Money derived in the TRP is generally lower than the Cost of Money percentage estimated by SWBT.

c. Overhead Cost Information.[5]

In response to the sub-issues under the above two headings, the Designation Order requires the LECs to explain how the costs were derived. LECs are required to provide overhead amounts or factors, justify rounding, etc. Further, LECs are to explain the basis for any differences in overheads among the various DS1 and DS3 services and between DS1 and DS3 services on one hand and expanded interconnection services on the other hand.[6] LECs using closure factors are to explain how the use of closure factors result in reasonable estimates of overhead costs for expanded interconnection.

A thorough description of SWBT's overhead loading process or 'closure factor' development requires an understanding of overheads in general and SWBT's rate development process since the inception of special access. The result of the function of rate/revenues minus costs has been given a number of 'labels' in this proceeding, such as: overhead, profit, markup, or margin.

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[5] Designation Order at p. 10.

[6] Designation Order at p. 11.

These terms, however, all have one thing in common -- they are the result of rate minus incremental cost or revenues minus the sum of Incremental Unit Cost (IUC) (as opposed to embedded cost as reflected in ARMIS).

For example, assume 10 units of demand with a rate of $1,000 and a cost of $500. The total revenues are $10,000 and total costs are $5,000. The resulting overhead/closure factor is 2.0. If all future new rates are set to provide the same level of overhead, a factor of 2.0 would be applied to the IUC associated with the new element. Likewise, the amount of overhead included in the exampled rate is $500 which divided by cost equals 1. If a future new element rate is set to provide the same level of overhead the formula would be IUC times 1 plus IUC which is the same as IUC times a closure factor of 2.0.

Consequently, regardless of the term applied to the process, the only difference between "closure factor" and "overhead factor" is simply the nomenclature used to describe the process. In its reply comments SWBT stated the development of the overhead loading was developed by comparing total revenues to total costs. SWBT indicated this was the same process utilized to identify the closure factor contained in the 1990 annual filing.[7] SWBT noted that the level of the overhead loading factor was reasonable when compared to the same result (closure factor) from the 1990 annual filing. SWBT compared the 2.26 DS1 overhead loading factor to the 1.96 closure factor contained in the 1990 annual filing to show the

[7] See, Reply Comments of SWBT, filed April 5, 1993, at p. 9.

reasonableness of the overhead loading reflected in then current DS1 rate levels.

Thus, SWBT's overhead/closure factor represents the overhead amount associated with special access service rates. Overhead is that portion of the revenue generated from sales of a service which is available to assist in recovery of the joint and common costs of the firm. As competitive pressures increase in the marketplace, overhead levels for particular services will depend primarily upon market conditions. To the extent that special access prices, and corresponding overhead margins, have been influenced by customer demand and competitive market conditions, these same factors will be reflected in interconnection charges via use of overhead/closure factors. Overhead/closure factors more closely represent actual market conditions than do arbitrary cost allocation schemes. Furthermore, since market conditions differ across individual services, (such as DS1 and DS3), price and overhead levels will reflect these variations. Identical DS1 and DS3 overhead/closure factors should therefore not be expected to result from the divergent customer demand and market supply characteristics exhibited by these separate service offerings. In addition, overhead levels between services will not likely be the same after price changes are made in compliance with Price Cap rules.

The only method to identify the amount of overhead, markup, or margin is to subtract cost from rate which is virtually the same as subtracting total costs from total revenues. Since the costs represent the total direct cost of providing the unit of service (common and joint costs are excluded) the difference

between the revenues and costs represents assistance to joint and common costs, or overhead.

Separations data, as obtained from Part 69 of the Commission's Rules and contained in ARMIS reports is not an appropriate tool for rate setting purposes.

The Part 69 rate element is special access, and this Part 69-driven-tool (ARMIS) is not useful for analyzing individual rate items. ARMIS cannot identify the direct cost of any specific special access rate item (e.g., DS1 channel termination, DS3 per mile mileage component, etc.)

Because embedded ARMIS data cannot identify the underlying cost of a special access sub-element, it likewise cannot identify the amount of reasonable overhead included in any sub-element rate level. The proper measure of overhead is the difference between the IUC to provide the sub-element (e.g., DS1 channel termination) and the rate level.

To further illustrate the reasonableness of its overhead/closure factor approach, SWBT has calculated the overhead factor which results from a comparison of the "Price-out" of 100 DS1s as prescribed and the IUC of these elements. The resulting overhead/closure factor is only 1.18 (excluding floor space rental).

The history of SWBT's special access rates begins in October 1985 after SWBT withdrew from the NECA pool. These rates were based upon the underlying incremental unit investment requirement to provide the service.

The Part 69-driven special access revenue requirement was allocated based upon the proportional relationship of the

underlying investment required to provide the service. In subsequent annual filings through 1990, SWBT utilized the current rate to allocate the revenue requirement so as to maintain existing rate relationships. In 1990 SWBT modified the relationship among the special access services based upon the filed underlying IUC to provide the service. As such, the rate levels deemed by the Commission to be the proper starting point for price caps included overhead amounts premised on the IUC results filed by SWBT in the 1990 annual filing.

Any allegations of double recovery as noted in the Designation Order are unjustified in reference to SWBT's rates.[8] SWBT's IUC methodology used for DS1, DS3 and collocation elements reflects only direct costs associated with providing the service. Any administrative costs are direct administrative costs incurred to provide the service and not overhead administrative costs. Any portion of the direct costs associated with SWBT's collocation elements that are disallowed must also then be removed from the DS1 and DS3 underlying costs so that the overhead loading factor can be recomputed.

Since SWBT used a common method to develop collocation and DS1/DS3 costs, any Commission change to collocation costs will also cause a change in the DS1/DS3 costs used to develop the overhead/closure loading factor. Removal of a cost from DS1/DS3 generally will not cause a change in rates. Thus, a reduction in DS1 or DS3 costs will only serve to increase the overhead loading factor.

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[8] Designation Order at p. 11.

Additional data required by the order is included in Appendix 4. Appendix 4 displays the overhead loading factor/closure factor for DS1 term options and DS3 term and volume options. SWBT does not offer any DS1 volume options.

d. Sample Price-outs.

LECs are required to provide a "price-out" for the provision of 100 DS1s as specified in Appendix D of the Designation Order.[9] Appendix 5, attached hereto, is SWBT's price-out chart. A diskette is included.

The Designation Order asks the LECs to price out their interconnection offerings in order to gauge the overall service cost of a sample 100 DS1 configuration. Further, the Commission specified that any nonrecurring costs must be amortized over a five-year period at an 11.25 percent interest rate.

The basis for comparison of the various companies' rates using the Sample Price-out designated by the Commission, however, can not give meaningful results. The use of a five-year amortization period as a means to compare various LEC rates for interconnection is not appropriate. If the Commission intends to use this analysis for the purposes of comparing individual LEC interconnection rates with individual LEC services, then the stipulation of a five-year amortization period makes this analysis flawed.

Comparisons are only meaningful when the items being compared have a common denominator (in this case, the same time period for recovery and interest rate). The Sample Price-out

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[9] Designation Order at p. 11.

procedure, and its requirement to illustrate price with nonrecurring rates recovered in five years, will erroneously show higher effective monthly rates for companies, like SWBT, that have chosen to recover the costs of collocation using nonrecurring charges to recover capital investments required to provide collocation to interconnectors. Nonrecurring charges amortized over five years are wrongly being compared to recurring rates recovering similar investments but based on different recovery periods and interest rates.

Further, this Sample Price-out is not useful for comparing existing DS1 and DS3 rates to special access expanded interconnection. As described above, expanded interconnection rates amortized over a five year period cannot be compared to LEC services whose depreciation period is prescribed by the Commission to be approximately twice as long. In addition, existing DS1 and DS3 rates correctly reflect the economies of scale being achieved by LECs in the provision of these services. This includes the ability to utilize items of plant and equipment to their capacities. This Sample Price-out assumes only 100 DS1s are being purchased. This assumption alone assures that a comparison to LEC DS1 and DS3 prices will be meaningless.

A Price-out using an amortization period reflecting the Commission's prescribed depreciation periods would yield a more meaningful comparison.

2. Individual Rate Elements.

a. Nonrecurring Charges for Recurring Costs.

SWBT did not compute nonrecurring charges for central office construction, power installation, or other rate elements based on the present discounted value of recurring costs associated with the capital outlay.

b. Floor Space Charges.

All LECs are required to quantify the differences between the cost at book value (embedded cost) and the cost at market value (current or prospective costs) of land and building associated with collocation. SWBT is required to explain whether BOMA rental rates include overheads, which overheads are included, and why those overheads differ between Telephone Exchange buildings and Office buildings.[10]

The only market value data that SWBT has available are for those costs associated with investments in buildings.[11] SWBT estimates that the embedded (book value) investment for buildings where expanded special access interconnection is tariffed is approximately $47.51 per square foot. The corresponding estimated current (market value) investment is approximately $130.61 per square foot. The embedded (book value) investment associated with land where collocation buildings are located is approximately $3.93 per square foot. Current (market value) investment figures for

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[10] Designation Order at p. 12.

[11] Investment-related cost is just one component of floor space charges. Other components such as maintenance and administrative expenses are also included in the charges. Consequently, the relationship of current cost of investment to the embedded cost is not indicative of differences in rate levels that would result from the use of embedded cost data.

land are not available. Nevertheless, these figures are irrelevant to how SWBT developed its monthly floor space rental charges.

SWBT used a "market value" approach based on figures published by BOMA and R. S. Means to establish floor space rates. Page 2 of Exhibit B of Appendix 3 outlines how "Floor Space Costs" were developed.

SWBT used the 1992 BOMA Experience Exchange Report as a basis for the "Floor Space Rental Rates." These rates do not include any unusual overheads but do reflect market-driven rates for typical "office" floor space in 14 different cities. Every city in the report that was in SWBT's territory was used to obtain a representative sample for developing an average rate for each state. SWBT did not include any additional maintenance costs, administrative costs, or any other costs with the market value rental rates, except as described below.

The publication, "R. S. MEANS SQUARE FOOT COSTS," was then used to develop a cost factor to adjust the office space rates described above. When compared to "office" building construction costs, "telephone exchange" building construction costs are 1.72 times more expensive. Appendix 6, Rental Rate Methodology, lists the specific square foot rates per city and the revised cost based on the 1.72 multiplier. Telephone Exchange buildings are 1.72 times more expensive to construct than office buildings due to more expensive structural, electrical, mechanical and fire resistive systems and components required by building codes and telecommunications industry practices. These requirements are designed to provide a greater ability to withstand natural disasters and to ensure continuity of service.

Appendix 7 contains copies of relevant pages from "R. S. MEANS" and Appendix 8 contains the relevant pages for the BOMA publication. These references support the rates shown on the "Rental Rate Methodology" sheet. The BOMA rental rates are based on market-driven factors for each city at the time the information was collected. The information was based on 1991 analysis in each city. These rates are designed to cover normal operating expenses including maintenance, utilities, cleaning, etc., as shown under the expense heading for each city. These rates do not include any Tenant Accommodation Charges (TACs) (building modification costs required for physical collocation).

As stated above, SWBT used every city within its territory that was listed in the BOMA publication in developing each of the five state averages for the floor space rental rates.[12] The tariff specifies a monthly rate/100 sq. ft. for each state as shown in Appendix 9. Teleport has suggested that the Commission establish a ceiling of $2 per square foot per month on floor space rentals. This recommended cost exceeds all of SWBT's five-state rental rates.[13]

c. Power Charges.

All LECs are to provide the equations used to compute the costs of the AC power and DC power. SWBT is required to explain why it is necessary for the interconnector to purchase both POT

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[12] See, Appendix 6 and 8 attached.

[13] See also, Teleport's comparison of LEC floor rental rates as noted in Appendix 10.

power and DC power and to explain why these charges are not duplicative.[14]

SWBT has unbundled its costs for providing power to the cage. SWBT has developed separate costs that reflect: (1) the material necessary to provide power to the cage; and (2) the usage of power. The POT power arrangement can be compared to wiring a house for electricity and the DC power element is comparable to what would be paid to a power utility company each month for providing electricity.

The POT Power Arrangement elements are set to recover the costs of installing and maintaining the physical facilities required to provide the DC power from the central office power equipment to the interconnector's space. These facilities include power cables, terminating equipment and the necessary distribution panel installed in the POT frame (whether the POT frame is provided by SWBT or the interconnector). These costs are entirely attributable to the particular interconnector. As with the other expanded interconnection nonrecurring charges, no overhead loading was applied to the POT power arrangement. The associated recurring element recovers the expenses expected to be incurred by SWBT in maintaining and administering the equipment.

The DC Transmission Power monthly rate element is set to recover the costs of producing the required amounts of DC power (40 or 100 AMPs) offered. This includes the cost of the required AC power and the costs associated with equipment involved in the AC to DC conversion. This equipment has a capacity greater than the 40

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[14] Designation Order at p. 13.

or 100 amperes offered and therefore, the estimated cost is limited to the portion of the total capacity utilized to produce 40 to 100 amperes.[15] Thus, the POT power arrangement nonrecurring element and the DC transmission recurring rate element are not redundant charges.

The AC equations used to compute AC power necessary to produce 40 or 100 AMPS of DC power are located in Appendix 2, Exhibit 4.

SWBT is to explain the "in-place factors" applied to vendor prices to obtain the investment amounts for the POT frame rate element, interconnection arrangement rate element, and transmission arrangement rate element. Also, SWBT is to explain how these factors are derived.[16]

As is common in SWBT cost calculations, the investments required in the various items of plant utilized in producing a particular function (e.g., POT Power Arrangement) are estimated by applying an "in-place" factor to the vendor's material price. The result of this calculation is an amount equal to the amount that is booked to the Part 32 account. In-place factors are developed, by account, from the ratio of material cost to total booked cost on recently completed plant and equipment additions. In-place factors provide a means of estimating the amount of investment required in plant and equipment when only material prices are known.

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[15] For example, 1200 amps total capacity with a design utilization of 85% produces usable amps of 1200*.85 = 1020. The portion used to provide 40 amps is 40/1020 or .039 times the total investment required for the 1200 amp plant.

[16] Designation Order at p. 14.

d. Cross-Connection Charges and Termination Equipment Charges.

All LECs are to state the percentage of cross-connected circuits that are assumed to require repeaters for the purposes of calculating cross-connection charges.[17] All LECs are to explain whether they are using a centralized or distributed collocation configuration.[18]

Using the Commission's definitions of centralized (undedicated) vs. distributed (dedicated) to describe collocation configurations, SWBT's would be termed distributed. SWBT's design includes no repeaters, and, as has been the subject of numerous informal discussions with the Commission and an Ex Parte contact, requires a dedicated Point of Termination (POT) frame.

SWBT has been falsely accused of embedding a useless piece of equipment in the expanded interconnection design in addition to the Main Distributing Frame (MDF). As shown herein, SWBT's design does not include a MDF because the proper frame for termination of SWBT's and Competitive Access Providers' (CAPs) DS1 and higher level signals is on the interconnection panels contained in the Point Of Termination (POT) frame. In addition, assuming, arguendo, that direct connection to a MDF was possible, the MDF does not offer the range of functionalities needed in an expanded interconnection arrangement. Therefore, the POT frame is required for interface, and as a termination point (DS1/DS3, DC Power, central office ground) between SWBT and the interconnectors. Additionally, interconnectors have the option of providing their

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[17] Designation Order at p. 13.

[18] Designation Order at p. 14.

own POT frames and DS1/DS3 interconnection arrangements if they so desire.

SWBT's expanded interconnection design, utilizing dedicated SWBT/interconnector DS1/DS3 interconnection arrangement panels housed in the POT frame, minimizes maintenance and repair efforts and costs. Further, because of dedicated cabling arrangements, service provisioning procedures and service turn-up is simplified and less costly for both SWBT and the interconnector while ensuring network protection and reliability.

The POT frame is a device which performs the following functions:

- houses interconnecting equipment such as the DSX panels where SWBT and interconnectors' facilities are terminated;
- houses the necessary power panels;
- provides for a common central office ground;
- is a readily accessible physical demarcation point between the interconnector's maintenance and ownership responsibility and SWBT's maintenance and ownership responsibility;
- provides test and cross-connecting capabilities;
- provides capability for visual/audible and remote monitoring;
- provides ease of access, by being placed in the interconnector's cage within the LEC central office.

The standard equipment bay layout for the POT frame houses interconnection arrangement panels (DSX type) where SWBT's facilities terminate on one panel and the interconnector's facilities terminate to the other panel. The POT frame interconnection arrangement design is being offered by at least